Caltrans
Maintenance
Storm Water
Pollution Prevention Bulletin

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Facility Storm Drain Inlet Management Strategies

"Only Rain Down The Drain." This isn't just a phrase – it's a motto. Even a small amount of water can wash sediment, trash, contaminants, and non-visible pollutants on facility grounds into storm drain inlets, sending them on their way to pollute rivers, lakes and oceans.

This bulletin reviews strategies and Best Management Practices (BMPs) that help minimize pollutants that leave the facility in storm water and non-storm water runoff.

Permit Prohibitions

The Caltrans Statewide NPDES Permit prohibits discharges of non-storm water and contaminated water from Caltrans-owned facilities unless appropriate control measures have been used to minimize adverse impacts to receiving waters to the Maximum Extent Practicable (MEP).

Storm water runoff has the potential to come in contact with and transport sediment and other pollutants from the facility grounds to storm drains or adjacent water bodies. Non-storm water, from sources such as landscape watering, vehicle cleaning, water line/hydrant flushing, and air conditioning condensation, can also transport pollutants as it flows across facility grounds.

Drain inlets become more visible when stenciling locations with paint or signs. Also, minimizing vehicle or equipment storage near drain inlets provides additional protection.

The best strategy for minimizing pollutants in discharges from the facility is to control pollutants at the source. Consider BMPs installed at storm drain inlets, catch basins and facility discharge points as final defense measures in the event preventive measures are not fully effective.

Prevent First Contact

Prevent storm water and non-storm water from coming into contact with potential pollutants by:

- Covering stockpiles and other materials stored outdoors prior to rain or snow.
- Using berms, sandbags or other containment methods to contain potentially contaminated runoff for materials that cannot be covered.
- Sweeping paved areas to remove sediment and other materials that have been tracked or dispersed across the facility.
- Ensuring that paved surfaces are in good condition.
- Preventing non-storm water, such as condensate water from ice machines and sprinkler overspray, from flowing across facility grounds.

Beat the "Oops" Factor

Since spills and leaks may occur at any time, plan ahead for them.

- Locate raw material stockpiles away from drain inlets and catch basins.
- Do not repair, maintain, or clean vehicles and equipment near inlets.

Locate waste receptacles away from drainage facilities and areas prone to flooding or ponding.

- Move receptacles, hazardous waste areas, raw materials storage areas, vehicle wash areas, and stockpiles away from drain inlets and areas that are prone to flooding or ponding.
- Do not park vehicles and equipment over or immediately adjacent to inlets.
- If a spill occurs, clean up the area immediately and dispose of cleanup materials properly.

The Last Defense

The last defense is protecting drain inlets and other facility discharge points with permanent BMPs.

- Stencil drain inlet locations with paint or signs.
- Maintain sufficient emergency materials, such as drain covers, absorbent booms, rags, or sandbags convenient to inlets.
- To prevent flooding, place BMPs so that the water will drain while retaining the pollutant on site.
- Inspect culverts, ditches, gutters, underdrains, horizontal drains, downdrains, and outlets annually, and as needed during the rainy season, to determine if cleaning or repairs are needed. This prevents the drainage structure from becoming a pollutant source itself.
- Collect and manage all water and material generated during drainage facility cleaning operations per BMP Section 2.13.2 - Solid Waste Management and Section 2.13.6 - Liquid Waste Management.

These tire flaps were brought out of retirement to provide an innovative and convenient solution for emergency inlet protection.

Caltrans Maintenance MSW Storm Water

Additional information is available in the Caltrans Maintenance Manual, Chapter C-6, or from your District Maintenance Storm Water Coordinator. Questions or comments may be directed to Greg Lockshaw, HQ Storm Water Coordinator, gregory_lockshaw@dot.ca.gov